IN THE SPECIFICATION

Please amend the paragraph at page 1, line 20 through page 2, line 18 as follows

An ultrasonic diagnostic apparatus is medical image equipment with which tomographic images of soft tissues beneath the body surface are derived from a living body in a noninvasive manner by the ultrasonic pulse echo method, and has been popular in the Departments relating to hearts, abdominal regions, and urinary, and the Department of obstetrics and gynecology. This ultrasonic diagnostic apparatus is, characteristically, smaller in size and lower in price than other types of medical image equipment (e.g., X-ray diagnostic equipment, X-ray CT equipment, MRI diagnostic equipment, nuclear medicine diagnostic equipment), capable of real time display, capable of offering a high level of safety without X-ray exposure, capable of blood flow imaging, and the like. Recently, the contrast echo has become popular with techniques in which more detailed diagnostic images are derived by increasing echo effects of ultrasound thanks to the contrast agent that has been injected into a subject. For example, with cardiac and abdominal organ examinations utilizing the contrast echo, the contrast agent for ultrasound is injected from a low-invasive vein to collect ultrasonic echo signals having intensified by thus injected contrast agent. Generating diagnostic images based on such echo signals allows estimation of the blood flow behaviors in a more detailed manner.

Please amend the paragraph at page 3, line 20 through page 4, line 5 as follows:

FIG. 1 is a diagram for illustrating the MTT. In FIG. 1, in a case of administering the contrast agent on a continual basis, the MTT will be the value to be derived in the following manner. That is, first calculated is an area S enclosed by a saturation value and a TIC between the administration starting time of the contrast agent and the time of reaching the

saturation value, and the result is then ~~standardized~~ normalized by the saturation value. Herein, the area calculation and the ~~standardization~~ normalization may be executed in the reverse order, and if this is the case, the TIC may be first ~~standardized~~ normalized by the saturation value to calculate the 5 area.

Please amend the paragraph at page 4, lines 6-20 as follows:

The issue here is that, the contrast agent used for ultrasonic diagnosis is composed of very-small bubbles, and has such a peculiar physical property that the contrast agent itself may be collapsed and vanished. Thus, simply applying the technique so far used with the MTT in other diagnostic apparatuses cannot realize the quantitative assessment with assured objectivity and accuracy. At present, the MTT in ultrasonic diagnosis is under study quite actively. For example, as to such problems as effects of bioattenuation in any examination using the contrast agent for ultrasound, and varying concentrations of the contrast agent whenever it is a generally known solution therefore is ~~standardization~~ normalization by saturation values.

Please amend the paragraph at page 4, line 24 through page 5, line 9 as follows:

The first problem is the varying MTTs due to uneven beam shapes. To be specific, generally, if the beam shapes are uneven in the depth direction, assessing any two point regions different in beam shape will result in varying volumes available for the very-small bubbles to collapse and vanish. If this is the case, even if a TIC is plotted for regions different in beam shape with respect to organs having the same level of blood flow behaviors without depending on the depth, for example, the resulting saturation values, i.e., maximum values, may still vary. Thus, the ~~standardized~~ normalized TICs show no coincidence, resulting in varying MTTs depending on the depth.

Please amend the paragraph at page 12 line 25 through page 13, line 6 as follows:

FIGS. 6A, 6B, and 6C are all a conceptual diagram for illustrating a compensation process to be executed with respect to the resultantly-derived MTT. FIG. 6A is a schematic view of a beam profile in the slice-thickness direction. FIG 6B is a diagram showing TICs (before and after ~~standardization~~ normalization) as a result of measurement using echo signals coming from positions A and B, respectively, in FIG. 6A. FIG. 6C is a diagram showing MTTs derived by FIG. 6B.

Please amend the paragraph at page 16, lines 2-4 as follows:

The ultrasound transmission section 6 is provided with a pulse generator 6A, a transmission delay circuit 6B, and a pulser 6C, and is connected to the ~~prove~~ probe 4.

Please amend paragraph at page 22, lines 5-15 as follows:

Next, the ultrasonic probe is placed at any position considered appropriate, and then after transmission and reception, the very-small bubbles in the observation area are collapsed for resetting. Alternatively, the very-small bubbles are collapsed for resetting while aiming at the blood vessel being a supply source from which the contrast agent is provided for the observation area (time t0 of FIG. 4). At this time, if the very-small bubbles are fully filled, the harmonic components derived at this time will be the maximum value of the receiving echo signal.

Please amend the paragraph at page 27, lines 1-11 as follows:

Herein, the unit of the MTT thus derived by the ~~standardized~~ normalized TIC of FIG. 4 is a second. This MTT can be calculated not only from the ~~standardized~~ normalized TIC but also from the ~~not-standardized~~ non-normalized TIC found in the middle part of FIG. 4. That is, in the TIC in the middle part of FIG. 4, calculation may be done by ~~standardizing~~ normalizing, by a saturation value, an area derived for the area enclosed by the maximum value and the TIC in the range from the rising time of the TIC (the time when signal detection from the contrast agent is started) to the time reaching the saturation value.

Please amend the paragraph at page 27, line 15 through page 28, line 11 as follows:

The graph found in the lower part of FIG. 5 shows bioinformation MTB (Mean Transit Beat) measurable by the TIC/MTT measurement section 25. In the MTB, the vertical axis denotes the concentration, and the lateral axis denotes the heart rate. To measure such MTB, in steps Sl and S2 of FIG. 4, executed is the process similar to the case of MTT measurement, that is, the flash echo in which the transmission interval is synchronized with the ECG 1 (refer to the graph found in the upper part of FIG. 5). Then, in step S3, based on the signal measured by the ECG 1, the representative value derived for every image may be plotted onto the coordinate plane in which the vertical axis denotes the concentration, and the lateral axis denotes the heart rate. This MTB is the bioinformation to be generated by parameters being individually unique but not the absolute time, exemplified by assessment of cardiac temporal phase (e.g., the last period of contraction, the last period of expansion), ~~standardization~~ normalization by the heart rate, and the like. Accordingly, using such an MTB expectably leads to effects of removing the susceptibility caused by varying heart rate for every individual due to each different age and body shape.

Please amend the paragraph at page 37, lines 14-27 as follows:

FIG. 9 is a diagram for illustrating the TIC/MTT 15 measurement utilizing the monitoring mode (Monitor Mode). As shown in the upper part of FIG. 9, monitoring scanning is performed from time t1 to t2. Alternatively, the resulting frame data may be previously stored in a storage medium such as memory to perform TIC analysis. Or, simultaneous display is a possibility with the TIC derived by gradually changing the intermittent transmission intervals. In this case, if the signal strength scale along the vertical axis is not the same, this increases the difficulty of comparative study. Thus, there needs to ~~fist standardize~~ first normalize both by using the respective saturation values to perform display with the same scale.

Please amend the paragraph at page 38, lines 1-15 as follows:

The TIC based on this monitoring scanning is low in S/N. The issue here is that, presumably, the result derived by ~~standardizing~~ normalizing the TIC by the saturation value, and the result derived by ~~standardizing~~ normalizing the TIC, by the saturation value, as a result of gradually-changed intermittent transmission intervals ideally show each similar behaviors, and render each similar curves. There may be a case, however, that the very-small bubbles may collapse and vanish at the time of monitoring depending on the acoustic fields, the concentration of the contrast agent, and the type of the contrast agent. In such a case, their rising parts have each different gradient, thus a possible application thereof is an index for sound pressure control at the time of monitoring.